

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 May 2005 (26.05.2005)

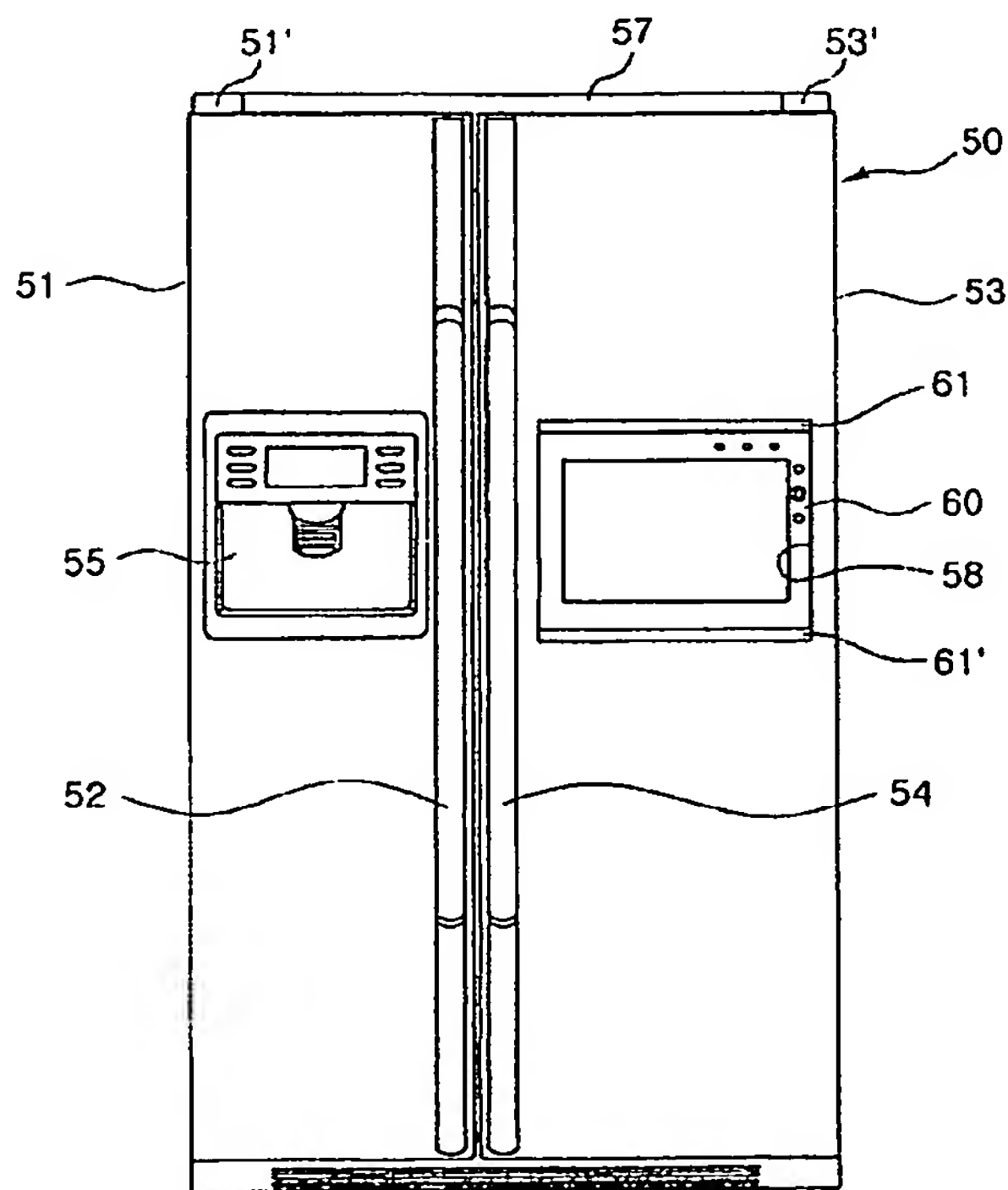
PCT

(10) International Publication Number
WO 2005/047786 A1

- (51) International Patent Classification⁷: **F25D 23/00** 10-2003-0088243
5 December 2003 (05.12.2003) KR
- (21) International Application Number: 10-2003-0088234
PCT/KR2004/002925 5 December 2003 (05.12.2003) KR
10-2003-0090402
11 December 2003 (11.12.2003) KR
10-2003-0090404
11 December 2003 (11.12.2003) KR
- (22) International Filing Date: 12 November 2004 (12.11.2004)
- (25) Filing Language: Korean
- (26) Publication Language: English
- (30) Priority Data:
10-2003-0080766 14 November 2003 (14.11.2003) KR
10-2003-0080768 14 November 2003 (14.11.2003) KR
10-2003-0082389 19 November 2003 (19.11.2003) KR
- (71) Applicant (for all designated States except US): **LG ELECTRONICS INC.** [KR/KR]; 20, Yoido-dong, Youngdungpo-gu, Seoul City 150-721 (KR).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): **OH, Seung-Jin** [KR/KR]; 302-1501, Hanyangsanho Apartment, Eum-nae-dong, Buk-gu, Daegu City 702-200 (KR). **LEE, Ik-Kyu** [KR/KR]; 203-505, Ducksan 2-Apartment, Dae-bang-dong, Changwon City Gyeongnam, 641-759 (KR).

[Continued on next page]

(54) Title: REFRIGERATOR



(57) Abstract: The present invention relates to a refrigerator. In the present invention, a communication pad 60 is installed in one of the doors 51 and 53 for opening and closing storage spaces formed in a refrigerator main body 50. The communication pad 60 is detachably installed in a seating space 58 of the door 53. While an upper end of the communication pad 60 is seated in the seating space 58 by an upper clamp 61, a lower end of the communication pad 60 is seated in the seating space 58 by a lower clamp 61'. The upper clamp 61 and the lower clamp 61' are installed in the seating space 58 through hinge assemblies 65. Here, the hinge assemblies 65 are configured so that the upper and lower clamps 61 and 61' rotate only by a force of a predetermined value or higher. According to the present invention constructed as above, it is possible to get advantages in that the communication pad 60 is securely mounted to and easily dismounted from the door 53.

WO 2005/047786 A1



JANG, Chan-Kyoo [KR/KR]; 202-517, Towol Sungwon Apartment, 45-1, Sangnam-dong, Changwon City Gyeongnam, 641-830 (KR). WOO, Ki-Cheol [KR/KR]; A-1411, Daedong Hanmaum Apartment, 306-9, Wanjol-dong, Hapso-gu, Masan City Gyeongnam, 631-862 (KR).

(74) Agent: WOORIN PATENT FIRM; 2nd Floor, Shinwon Bldg., 823-14, Yeoksam-dong, Kangnam-gu, Seoul City 135-080 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH,

PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.